

What is claimed is:

10990318-1

1 1. A method for allowing a user to proactively determine health status of
2 network objects and group views by dynamically manipulating a user interface of a
3 windows-based managed network environment, comprising:

4
5 defining one or more health characteristics for each network object of a
6 plurality of network objects grouped into one or more group views of the managed
7 network environment, wherein the one or more health characteristics of each
8 network object define a health status of the network object and wherein each
9 health characteristic of the one or more health characteristics has a health status
10 indicator representative of the health status of the health characteristic;

11
12 monitoring the one or more health characteristics for each network object in
13 order to determine the health status of each health characteristic of the one or
14 more health characteristics for each network object;

15
16 storing the one or more health characteristics for each network object of the
17 plurality of network objects in a health characteristic configuration file of a group
18 view of the plurality of group views to which the network object belongs;

19
20 displaying a plurality of group view containers within the user interface with
21 each group view container corresponding to a group view of a plurality of group
22 views, each group view of the plurality of group views representative of a grouping
23 of network objects of the plurality of network objects and containing a plurality of
24 group view attributes, defined by a plurality of attribute values in a group view

1 attribute list stored in an attribute configuration file of the group view, that define
2 the grouping of network components of the group view, wherein a user can
3 dynamically change one or more group views of the plurality of group views by
4 changing one or more group view attributes of the plurality of group view attributes,
5 wherein each group view container of the plurality of group view containers has a
6 group view health status indicator representative of the overall health status of the
7 group view represented by the group view container as determined by the health
8 status of each network object of the one or more network objects of the group view,
9 wherein each network object within a group view has a network object health status
10 indicator representative of the health status of the network object as determined by
11 the one or more health characteristics of the network object;

12
13 identifying each group view of the plurality of group views that has a poor
14 health status as indicated by the group view health status indicator of each group
15 view container of the plurality of group view containers displayed;

16
17 for each group view of the plurality of group views identified as having a
18 poor health status, selecting the group view to display the grouping of network
19 objects of the group view within the user interface;

20
21 identifying each network object of the selected group view that has a poor
22 health status as indicated by the network object health status indicator of each
23 network object;

1 for each network object of the selected group view identified as having a
2 poor health status, selecting the network object to display a grouping of the one or
3 more health characteristics of the network object;

4
5 identifying each health characteristic of the one or more health
6 characteristics of the network object that has a poor health status as indicated by
7 the health status indicator of the health characteristic; and

8
9 for each health characteristic of the one or more health characteristics
10 identified as having a poor health status, selecting the health characteristic to
11 display within the user interface a message indicative of an event that caused the
12 poor health status of the health characteristic.

13
14 2. The method of claim 1, wherein determining the health status of each health
15 characteristic comprises:

16
17 comparing a performance data of the health characteristic to a
18 predetermined threshold of the health characteristic; and

19
20 if the performance data of the health characteristic violates the
21 predetermined threshold of the health characteristic, causing the health status
22 indicator of the health characteristic to indicate a poor health condition of the health
23 characteristic.

1 3. The method of claim 1, wherein the network object is a network device of
2 the managed network environment.

3
4 4. The method of claim 1, wherein the network object is a network service of
5 the managed network environment.

6
7 5. The method of claim 1, wherein the one or more health indicators may
8 include disk utilization, memory utilization, network utilization, and processor
9 utilization.

10
11 6. The method of claim 1, wherein the health characteristic configuration file of
12 the group view is a registration file of the group view of the network object.

13
14 7. The method of claim 1, wherein the attribute configuration file of the group
15 view is a registration file of the group view of the network object.

16
17 8. The method of claim 1, wherein the health characteristic configuration file
18 and the attribute configuration file are contained within a registration file of the
19 group view of the network object.

20
21 9. The method of claim 1, wherein the group view health status indicator is a
22 color of an icon of the group view.

1 10. The method of claim 1, wherein the group view health status indicator is a
2 shape of an icon of the group view.

3
4 11. The method of claim 1, wherein the group view health status indicator is an
5 audible alarm.

6
7 12. The method of claim 1, wherein the network object health status indicator is
8 a color of an icon of the network object.

9
10 13. The method of claim 1, wherein the network object health status indicator is
11 a shape of an icon of the network object.

12
13 14. The method of claim 1, wherein the network object health status indicator is
14 an audible alarm.

15
16 15. The method of claim 1, wherein the message is stored as a field of the
17 network object.

18
19 16. The method of claim 1, wherein the message is stored as a field of the
20 network object in an alarm browser used in an Internet application.

21
22 17. The method of claim 1, wherein after selecting the group view to display the
23 grouping of network objects, further comprising:
24

1 determining a context sensitive information of the group view of the plurality
2 of group views, comprising:

3
4 performing a lookup operation on the registration file for the group
5 view selected by the user;

6
7 modifying one or more user interface mechanisms of the user interface to
8 conform with the context sensitive information of the group view selected by the
9 user, comprising:

10
11 displaying only one or more items of the one or more user interface
12 mechanisms that are contained in the registration file so that the one or more
13 interface mechanisms conform with the context sensitive information of the group
14 view selected by the user.

15
16 18. A method for allowing a user to proactively determine health status of
17 network objects and group views by dynamically manipulating a user interface of a
18 windows-based managed network environment, comprising:

19
20 defining one or more health characteristics for each network object of a
21 plurality of network objects grouped into one or more group views of the managed
22 network environment, wherein the one or more health characteristics of each
23 network object define a health status of the network object and wherein each

1 health characteristic of the one or more health characteristics has a health status
2 indicator representative of the health status of the health characteristic;

3
4 monitoring the one or more health characteristics for each network object in
5 order to determine the health status of each health characteristic of the one or
6 more health characteristics for each network object;

7
8 storing the one or more health characteristics for each network object of the
9 plurality of network objects in a health characteristic configuration file of a group
10 view of the plurality of group views to which the network object belongs;

11
12 displaying one or more network objects within the user interface
13 corresponding to a group view of a plurality of group views defined by a plurality of
14 attribute values in a group view attribute list stored in an attribute configuration file
15 wherein a user can dynamically change the group view by changing one or more
16 group view attributes of the plurality of group view attributes, wherein each network
17 object within a group view has a network object health status indicator
18 representative of the health status of the network object as determined by the one
19 or more health characteristics of the network object;

20
21 identifying each network object of the one or more network objects of the
22 group view that has a poor health status as indicated by the network object health
23 status indicator of each network object;

1 for each network object of the selected group view identified as having a
2 poor health status, selecting the network object to display a grouping of the one or
3 more health characteristics of the network object;

4
5 identifying each health characteristic of the one or more health
6 characteristics of the network object that has a poor health status as indicated by
7 the health status indicator of the health characteristic; and

8
9 for each health characteristic of the one or more health characteristics
10 identified as having a poor health status, selecting the health characteristic to
11 display within the user interface a message indicative of an event that caused the
12 poor health status of the health characteristic.

13
14 19. The method of claim 18, wherein determining the health status of each
15 health characteristic comprises:

16
17 comparing a performance data of the health characteristic to a
18 predetermined threshold of the health characteristic; and

19
20 if the performance data of the health characteristic violates the
21 predetermined threshold of the health characteristic, causing the health status
22 indicator of the health characteristic to indicate a poor health condition of the health
23 characteristic.

1 20. The method of claim 18, further comprising:

2
3 determining a context sensitive information of the group view of the plurality
4 of group views, comprising:

5
6 performing a lookup operation on the registration file for the group
7 view selected by the user;

8
9 modifying one or more user interface mechanisms of the user interface to
10 conform with the context sensitive information of the group view selected by the
11 user, comprising:

12
13 displaying only one or more items of the one or more user interface
14 mechanisms that are contained in the registration file so that the one or more
15 interface mechanisms conform with the context sensitive information of the group
16 view selected by the user.

17
18 21. The method of claim 18, wherein the health characteristic configuration file
19 and the attribute configuration file are contained within a registration file of the
20 group view of the network object.

21
22 22. The method of claim 18, wherein the message is stored as a field of the
23 network object in an alarm browser used in an Internet application.